

WORLD CLASS TRAINING FOR THE WORLD'S BEST ARMY



Protect the Force Through Risk Management

CMTC





AGENDA

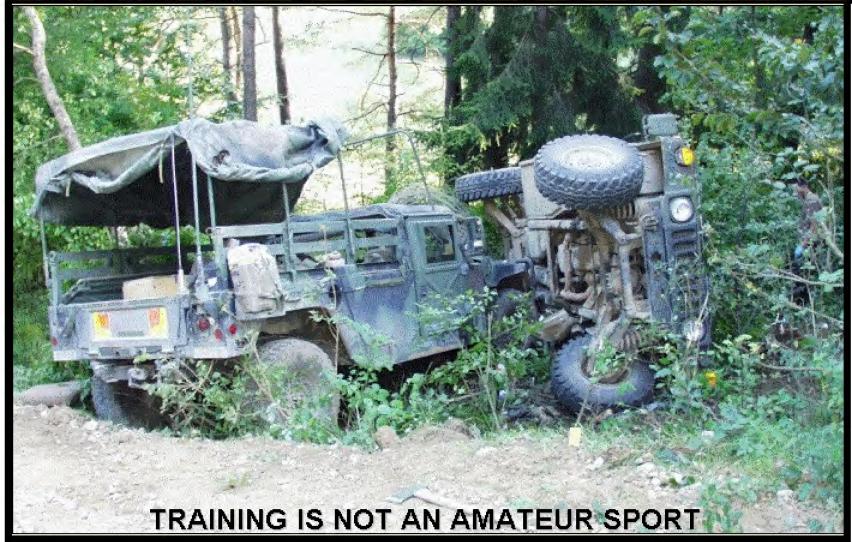


- 1. CMTC FATAL ACCIDENTS
- 2. ROTATIONAL UNIT TRENDS
- 3. INJURY CAUSATION FACTORS
- 4. VEHICLE ACCIDENT CAUSATION
- 5. VEHICLE MISHAP TRENDS
- 6. INJURY CAUSATION FACTORS 2BDE 1ID
- 7. VEHICLE ACCIDENT CAUSATION 2 BDE 1ID
- 8. AVOIDING MISHAPS
- 9. TRENDS
- 10. DISCIPLINE AND PROCEDURES
- 11. AVIATION MISHAP PREVENTION
- 12. RISK MANAGMENT



ACCIDENT TRENDS







CMTC FATAL ACCIDENTS Apr 93 – Sep 04

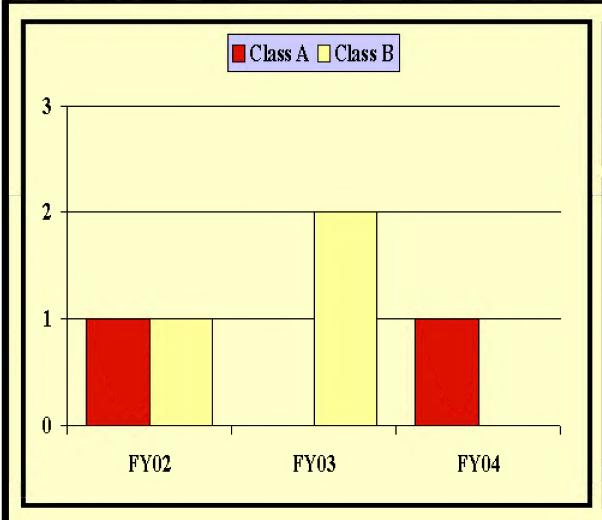






Rotational Trends Class A & B Ground Accidents





Class A - Fatality, permanent disability, ≥\$1,000,000 property damage

Class B - ≥\$200,000 but <\$1,000,000; an injury results in permanent partial disability; ≥3 personnel are inpatient hospitalized as as the result of a single occurrence.



Rotational Trends Class A & B FY 02 to date



1 = Class A TC fatality – M113 Rollover

1 = Class A Driver fatality – HMMWV towing HMMWV

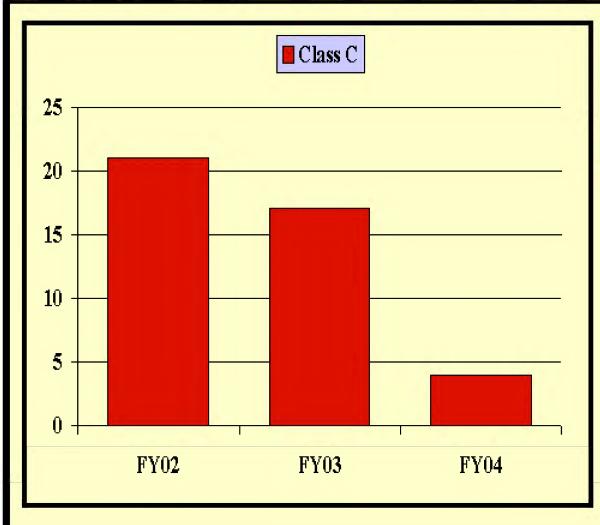
1 = Class B Finger amputation

1 = Class B Bradley roll-over 7 personnel injured



Rotational Trends Class C Ground Accidents



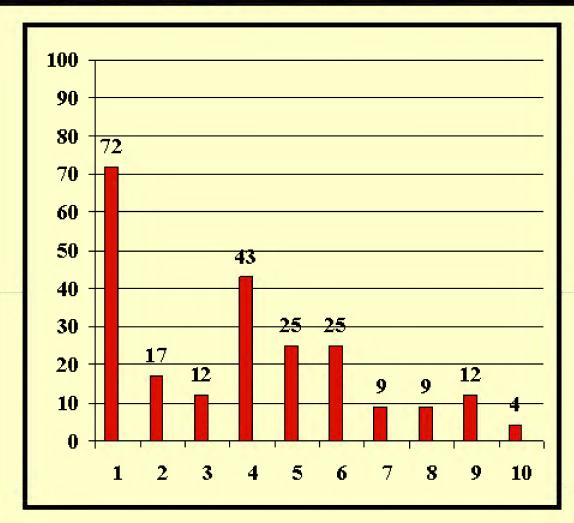


Class C - Lost workday injury or≥\$20,000 but <\$200,000 property damage



INJURY CAUSATION FACTORS





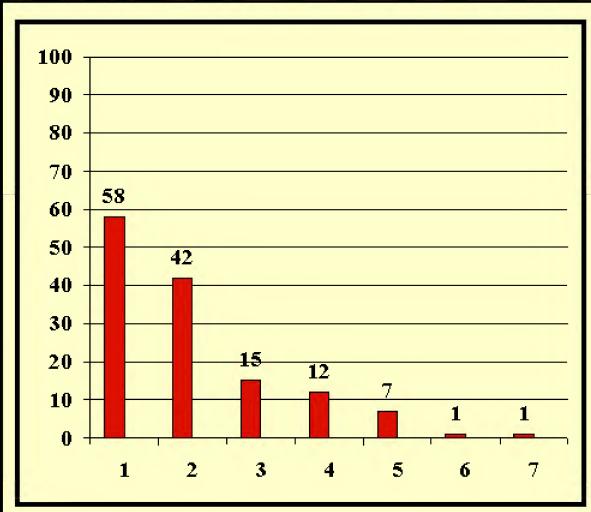
FY 02 to Date
ALL PERSONNEL INJURY
ACCIDENTS

- 1-SLIPS, TRIPS, FALLS
- 2-CUT/PUNCTURED BY
- 3- PUSH, PULL, LIFT
- 4- STRUCK BY/AGAINST
- 5- HEAT, COLD, & BURNS
- 6-PINCHED IN/BETWEEN
- **7-EYE INJURIES**
- 8-FLORA/FAUNA/INSECT
- 9-EXPLOSIVES/HAZMAT
- 10-PYRO/AMMO



VEHICLE ACCIDENT CAUSATION





FY 02 to Date ALL VEHICLE ACCIDENTS REPORTED

- 1-COLLISIONS
- 2-ROLLOVERS
- 3-FIRES
- 4-JOSTLED
- 5-TOWING
- **6-EQUIPMENT FALLING**
 - **OFF VEHICLES**
- 7-RUN-OVERS



Vehicle Mishap Trends FY-02 To Present



TRENDS		<u>FY</u>		CAUSATION FACTORS
	02	03	04	
COLLISIONS =	27	27	4	Limited Visibility Lack of Preventive Maintenance
ROLLOVERS =	19	22	1	 Lack of Situational Awareness Cornering at High Speeds Cornering Fast With High Loads
FIRES =	4	9	2	Failure to Wear Seat Belts Failure to Secure Loads
JOSTLED =	8	2	2	Driving Over Drop Offs Steep Inclines
TOWING =	2	3	2	Improper Spacing Distance in Convoys
EQUIPMENT = FALLING OFF VEHICLES	1	0	0	 Driving Too Fast For Conditions Low Illumination & Night Vision Goggles Failure to Use Ground Guides Failure to use/properly use chock
RUNOVERS = (Other vehicles, equipment, & personnel	1	0	0	blocks



AVOIDING MISHAPS



COUNTERMEASURES

- Tactical vehicle fires: Inspect portable fire extinguishers
 and ensure personnel know how to use them. Use more than one
 extinguisher at the same time. The Fire Department is a long
 distance away.....
- Collisions: Slow down during "Limited Visibility" including limited visibility caused by vegetation, terrain and NVG Operations" and use ground guides. Obey speed limits per ROE.
- Slips, trips, falls and back strains: Ensure supervisors enforce "3- Points of Contact" and the two man lift rule for heavy objects.



AVOIDING MISHAPS



COUNTERMEASURES

- Rollovers: Slow down and use chains on mud, ice and snow. On secondary trails, go through water/mud holes rather than around them.
- Runaway vehicles: Runaway vehicle mishaps occur every rotation. Teach soldiers when and where to use chock blocks. Enforce standards!
- <u>Towing accidents:</u> Train operators to standard, leaders continue training by passing on proven trade techniques. Entrust operators with critical tasks only after they have demonstrated needed skills.



RECENT TRENDS OBSERVED

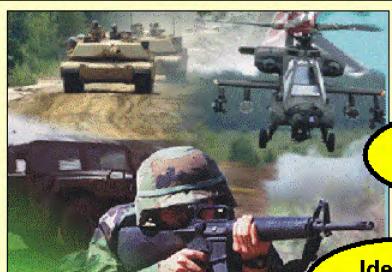


- Failure to use Personal Protective Equipment (PPE)
 - Particles in Eyes
 - Chemical burns (JP8) of eyes, hands & legs
 - Head injuries while riding in armored vehicles
- Ground guiding improper or not used
- Being pushed out of control by a towed vehicle
- Excessive Speed under all conditions
- Vehicle Fires due to poor PMCS
- Explosive & Pyrotechnic mishaps
- Cold weather injuries
- Insect Bites



SUPERVISORS ARE THE KEY





Assess Hazards Develop Controls & Make Risk Decision

Identify Hazards Implement Controls



Supervise & Evaluate

FIRST LINE SUPERVISORS ARE THE KEY FOR A SAFE AND SUCCESSFUL ROTATION



DISCIPLINE AND PROCEDURES





PMCS Continues during operation!

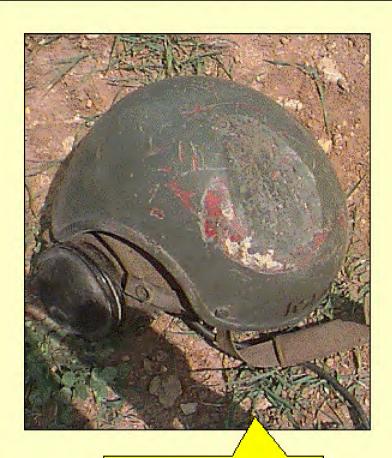


Operator "rear-ended" the truck he was following

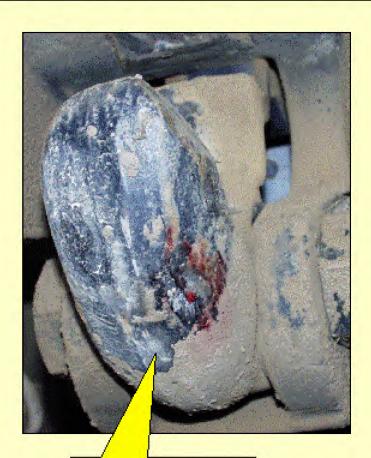


PINCH POINTS





Inspect and ensure hatch pins are in place



Keep Limbs Out of Pinch Points



CONCERTINA WIRE



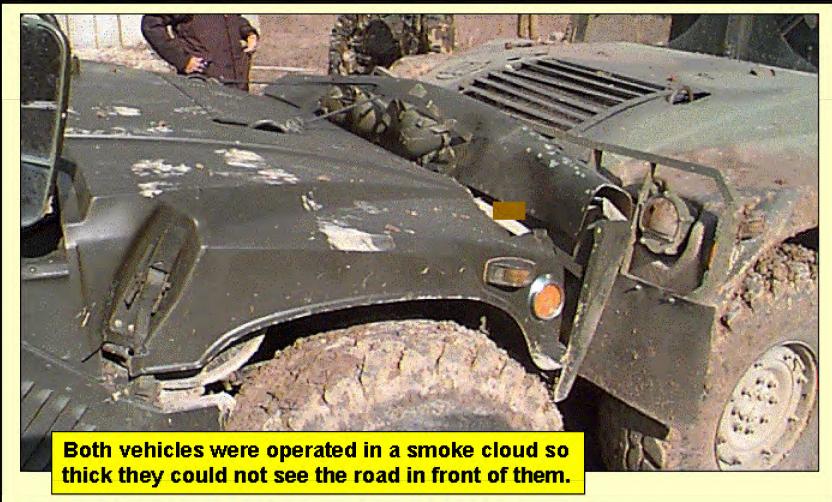


INSURE YOU EXPECT THE UNEXPECTED



Excessive Speed and Low Visibility Collisions







LIMITED VISIBILITY OPERATIONS





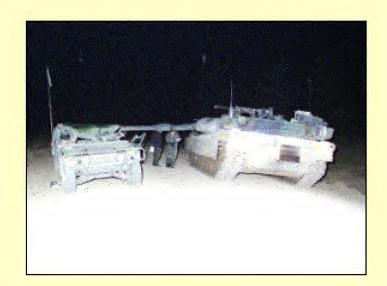
SLOW DOWN IN LIMITED VISIBILITY



LIMITED VISIBILITY CONTINUED







Limited Visibility

is never the cause, it is merely an environmental condition – the cause was

Excessive Speed!



STEEP GRADES



<u>Hazards</u>

"No Adult Supervision"
"Driver Experience"
"Speed"
"Steep Roads"
"Drop-Offs"
"Night Vision"
"Poor Risk
Management"





Lesson Learned Secure & Chock Vehicles





NO CHOCKS BLOCKS AT ACCIDENT SCENE

Don't make a bad situation worse. The belief that we must discard safety in favor of urgency will eventually lead to more damage, injury or death.



CHOCK VEHICLES





RUNAWAY VEHICLES CONTINUE TO BE A PROBLEM AT THE CMTC:

- PARKING ON INCLINES SO STEEP THAT CHOCKING IS INEFFECTIVE
- USING THE WRONG CHOCKS, USING THEM IMPROPERLY
- NOT USING CHOCK BLOCKS AT ALL



Lesson Learned Slow Down





Slow down, secure load and wear seatbelts





VEHICLE ROLLOVERS



Muddy trails, too fast and driver overconfidence







Lesson Learned Towing Requires Training





Towing vehicles is not a task to be taken lightly. Driving too fast, especially down hill, will quickly lead to the towed vehicle pushing the tower out of control.

REVIEW THE -10 TOWING STANDARDS!



Winter Driving Hazards Risk Reduction



Negotiating snow covered slopes requires caution and foresight. Allow the vehicle in front of you get to the top or bottom before you commit your vehicle.





Winter Driving Hazards Risk Reduction







HEATER SAFETY





Only trained personnel may operate heaters!



HEATER SAFETY



ONLY USE AUTHORIZED HEATERS

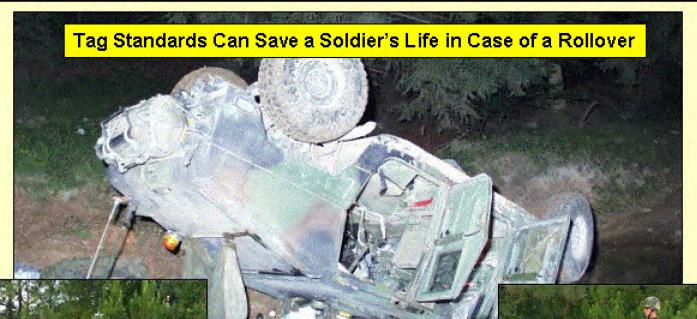


UNVENTED AND PROPANE HEATERS ARE NOT AUTHORIZED



NAMETAG DEFILADE STANDARD





RIGHT

WRONG



LESSON LEARNED







Aviation Mishap Prevention







Aviation Hazards Associated with the CMTC

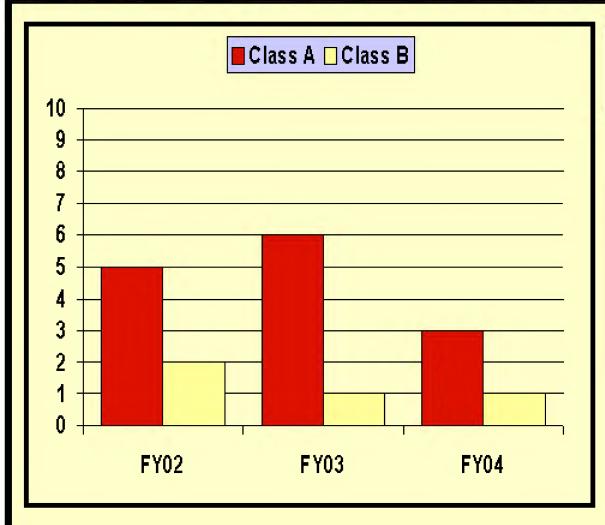


- Multiple aircraft conducting missions in a high density environment (O/C, OPFOR, BLUFOR, and UAV aircraft)
- Low ceilings and visibility in winter months
- Excessive mud or dust conditions on Hohenfels LZs which can contribute to aircraft dynamic rollover, brownout, and whiteout
- Aircraft strike of wires, trees, or antennas



Class A & B Aviation Accidents (Afghanistan)





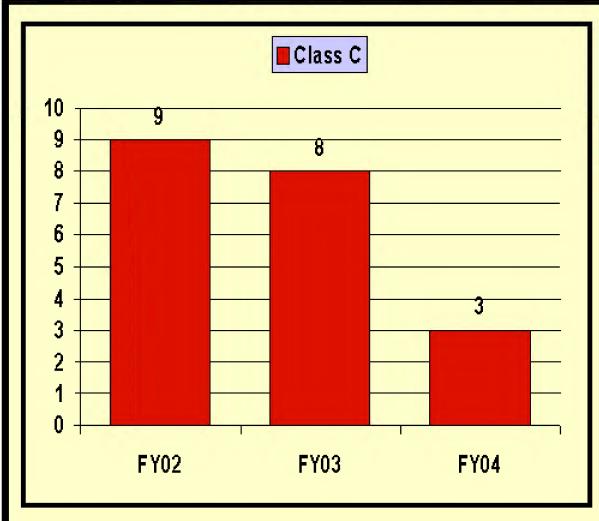
Class A - Fatality, permanent disability, ≥\$1,000,000 property damage or loss of aircraft

Class B - ≥\$200,000 but <\$1,000,000; an injury results in permanent partial disability; ≥3 personnel are inpatient hospitalized as as the result of a single occurrence.



Class C Aviation Accidents (Afghanistan)



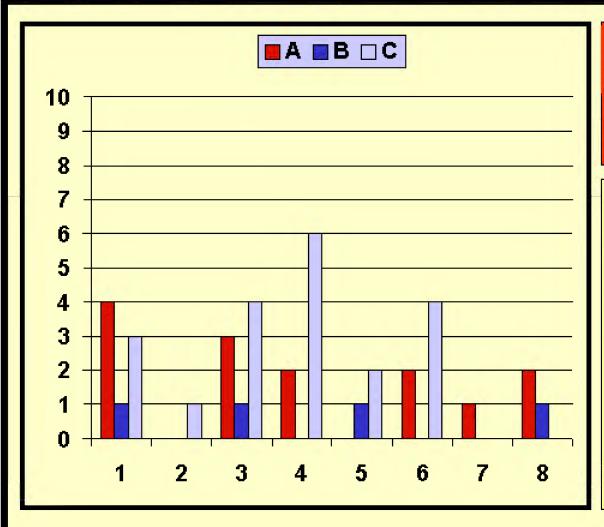


Class C - Lost workday injury or≥\$20,000 but <\$200,000 property damage



AVIATION ACCIDENT CAUSATION (Afghanistan)





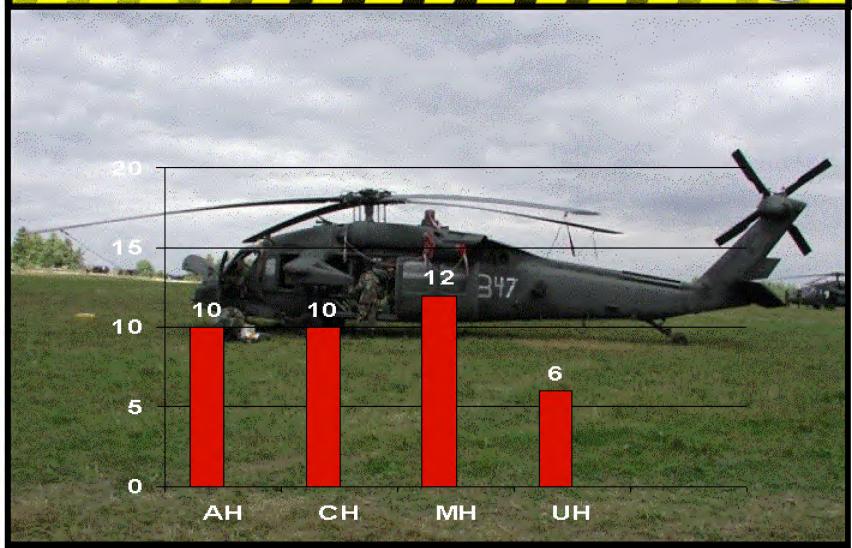
FY 02 to Date ALL AVIATION ACCIDENTS REPORTED

- 1-BROWNOUT
- 2-LOSS OF POWER
- 3-LOSS OF CONTROL
- 4-MAINTENANCE
- 5-ENVIRONMENTAL
- **6-HUMAN ERROR**
- 7-FALL FROM AIRCRAFT
- 8-UNKNOWN



Aviation Accidents (Afghanistan) By Aircraft Type







Mishap Prevention



SUCCESSFUL COUNTERMEASURES

SITUATIONAL AWARENESS

CDR'S ASSESSMENT OF AVIATION TASK FORCE
AND AIRCREW PROFICIENCY

RISK ASSESSMENT PRIOR TO EACH MISSION

FOCUS ON TRAINING OBJECTIVES



Historical Considerations



OPERATIONAL CHALLENGES

CMTC EXPERIENCE

DECONFLICTION OF

BLUFOR/OPFOR/OC/WAY AIRCRAFT IN A

COMPRESSED TRAINING AREA

FARP OPERATIONS 40S, STOL & OP19



Historical Considerations

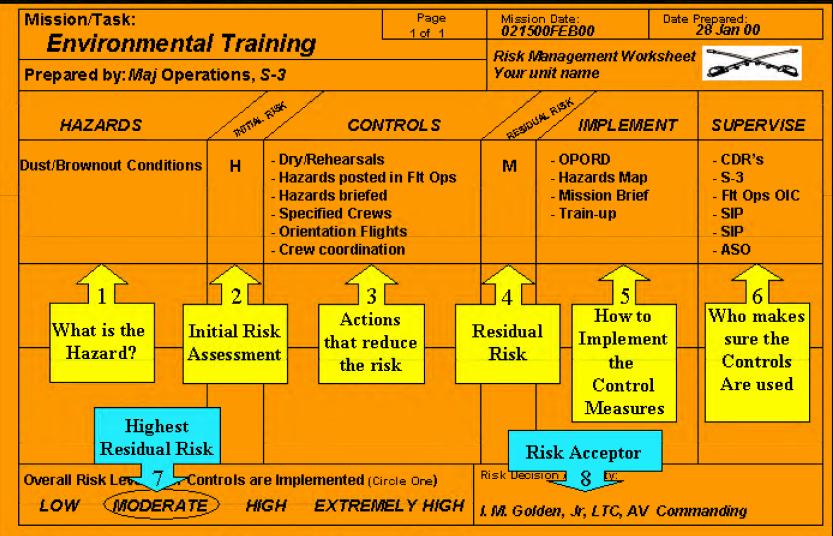






RISK ASSESSMENT (PRIOR TO EVERY MISSION)













RM and Decision Making



Risk Management Integrated into the Military

Decision-Making Process

	Risk Management Steps						
Military Decision- Making Process	Seep 1 Measury Heateds	864р 2 Азэсээ Нозза do	Scep 3 Develop Cocurols cool Make Risk Decision	Seep 4 Teoglesees Consults	Supp 5 Supra macanad Emalunac		
Mission Receipt	х						
Mission Analysis	х	х					
COA Development	х	х	х				
COA Anelysis	х	х	х				
COA Comperison			x				
COA Approval			х				
Orders Production				х			
Rehears al (1)	х	х	х	х	х		
Execution and (1) Assessment	х	х	х	х	х		

⁽¹⁾ All boxes are marked to emphasize the continued use of the risk management process throughout them is ion



RM Integrated Into Operations & Training Cycle









Leadership



ALL ACCIDENTS ARE PREVENTABLE



